Complete Summary

GUIDELINE TITLE

Clinical practice guideline: treatment of the school-aged child with attention-deficit/hyperactivity disorder.

BIBLIOGRAPHIC SOURCE(S)

American Academy of Pediatrics. Clinical practice guidelines: treatment of the school-aged child with attention-deficit/hyperactivity disorder. Pediatrics 2001 Oct; 108(4): 1033-44. [62 references]

COMPLETE SUMMARY CONTENT

SCOPE

METHODOLOGY - including Rating Scheme and Cost Analysis
RECOMMENDATIONS
EVIDENCE SUPPORTING THE RECOMMENDATIONS
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS
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INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT

CATEGORIES

IDENTIFYING INFORMATION AND AVAILABILITY

SCOPE

DISEASE/CONDITION(S)

Attention-deficit/hyperactivity disorder (ADHD)

GUIDELINE CATEGORY

Management Treatment

CLINICAL SPECIALTY

Family Practice Neurology Pediatrics Psychiatry Psychology

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Nurses
Physician Assistants
Physicians
Psychologists/Non-physician Behavioral Health Clinicians

GUIDELINE OBJECTIVE(S)

To provide evidence-based recommendations for the treatment of school-aged children with attention-deficit/hyperactivity disorder (ADHD)

TARGET POPULATION

Children 6 to 12 years old with attention-deficit/hyperactivity (ADHD) disorder in primary care settings

Note: This guideline is not intended for children with mental retardation, pervasive developmental disorder, moderate to severe sensory deficits such as visual and hearing impairment, chronic disorders associated with medications that may affect behavior, and those who have experienced child abuse and sexual abuse.

INTERVENTIONS AND PRACTICES CONSIDERED

Treatment/Management

- 1. Stimulants (first-line treatment):
 - a. Methylphenidate: Short-acting (Ritalin, Methylin); Intermediate-acting (Ritalin SR, Metadate ER, Methylin ER); Long-acting (Concerta, Metadate CD, Ritalin LA*)
 - b. Amphetamine: Short-acting (Dexedrine, Dextrostat); Intermediate-acting (Adderall, Dexedrine spansule); Long-acting (Adderall-XR*)

*Not approved by the U.S. Food and Drug Administration (FDA) at the time of the publication of the original guideline.

- 2. Antidepressants (second-line treatment)
 - a. Tricyclics (TCAs): Imipramine, Desipramine
 - b. Bupropion (Wellbutrin, Wellbutrin SR)
- 3. Behavioral therapy
 - a. Positive reinforcement (providing rewards or privileges contingent on the child's performance)
 - b. Time-out (removing access to positive reinforcement contingent on performance of unwanted or problem behavior)
 - c. Response cost (withdrawing rewards or privileges contingent on the performance of unwanted or problem behavior)
 - d. Token economy (combining positive reinforcement and response cost)
- 4. Education and counseling of children and parents regarding attentiondeficit/hyperactivity disorder (ADHD), affects of condition, treatment planning, resources

- 5. Coordination/collaboration of care among clinicians, parents, teachers, child, other school personnel, such as nurses, psychologists, and counselors, as appropriate, to develop and monitor target outcomes
- 6. Evaluation and reassessment of children who do not meet target outcomes: evaluation of the original diagnosis, use of all appropriate treatments, adherence to the treatment plan, and presence of coexisting conditions
- 7. Periodic systematic follow-up to monitor adherence and response to treatment

MAJOR OUTCOMES CONSIDERED

Efficacy and safety of pharmacological and nonpharmacological interventions

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources) Hand-searches of Published Literature (Secondary Sources) Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

In 1997, the McMaster University Evidence-based Practice Center received the contract for reviewing the literature related to treatment of children with attention-deficit/hyperactivity disorder (ADHD).

The literature search for the McMaster report (see the "Companion Documents" field) was conducted using MEDLINE (from 1966), CINAHL (from 1982), HEALTHStar (from 1975), PsycINFO (from 1984), EMBASE (from 1984), and the Cochrane Library (November 1997). Reference lists of eligible studies and files of members of the research team and partner organizations were also searched.

NUMBER OF SOURCE DOCUMENTS

2405 citations were identified from the McMaster report (see the "Companion Documents" field) of the literature on treatment of attention-deficit/hyperactivity disorder (ADHD); including 92 reports, describing 78 different studies that were identified for further analysis. In addition to the McMaster report, other sources of data were identified.

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

For each recommendation, the subcommittee graded the quality of evidence on which the recommendations were based.

Grades of evidence were grouped into 3 categories: good, fair, or poor.

METHODS USED TO ANALYZE THE EVI DENCE

Review of Published Meta-Analyses Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

The McMaster report (see the "Companion Documents" field) focused on the evidence from comparative studies on the effectiveness and safety of pharmacological and nonpharmacological interventions for attention-deficit/hyperactivity disorder (ADHD) in children and adults and whether combined interventions are more effective than individual interventions. This resulted in several questions in the following 7 areas: (1) studies with drug-to-drug comparisons of pharmacological interventions; (2) placebo-controlled studies evaluating the effect of tricyclic antidepressants; (3) studies comparing pharmacological and nonpharmacological interventions; (4) studies evaluating the effect of long-term therapies; (5) studies evaluating therapies for ADHD in adults (i.e., those older than 18 years of age); (6) studies evaluating therapies given in combination; and (7) studies evaluating adverse effects of pharmacological interventions.

Several systematic reviews and meta-analyses have examined placebo-controlled trials of stimulant medication and have established the short-term efficacy of these agents for core symptoms. Placebo-controlled trials of stimulant medication were reviewed in the McMaster report only if they met the criteria for inclusion in any of the other 6 areas. The report also focused on head-to-head comparisons of pharmacological interventions and of pharmacological and nonpharmacological interventions because these were identified as of prime interest to clinicians.

The McMaster report of the literature on treatment of ADHD followed current standards for analyzing research evidence. Studies in this report were selected for evaluation if they were randomized, controlled trials that focused on the treatment of ADHD in humans and if they were published in peer-reviewed journals. Nonrandomized, controlled trials were included only if they provided data on adverse effects that were collected for more than 16 weeks. Studies of multiple conditions that included separate analyses for patients with ADHD were also included.

In addition to the McMaster report, other sources of data were used to support clinical practice guideline recommendations. Although the McMaster report included results of the multimodal treatment study of children with ADHD (MTA), the subcommittee also carefully evaluated the results of this large study separately. The subcommittee used data from the Canadian Coordinating Office for Health Technology Assessment (CCOHTA) study. This review addressed the following 3 major issues related to treatment of children with ADHD: (1) a clinical evaluation of the use of methylphenidate for ADHD; (2) the efficacy of stimulant medications and other therapies; and (3) an economic evaluation of the pharmacological and behavioral therapies for ADHD. Many studies of behavioral interventions for ADHD use crossover techniques, where effects were determined

on the same children when they did and did not receive treatment. The McMaster report excluded these crossover trials.

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Recommendations were made at 3 levels. Strong recommendations were based on high-quality scientific evidence or, in the absence of high-quality data, strong expert consensus. Fair and weak recommendations were based on lesser quality or limited data and expert consensus. Clinical options are identified as interventions for which the subcommittee could not find compelling evidence for or against. Clinical options are defined as interventions that a reasonable health care provider might or might not wish to implement in his or her practice.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The draft clinical practice guideline underwent extensive peer review by committees and sections within the American Academy of Pediatrics (AAP), numerous outside organizations, and other individuals identified by the subcommittee. Liaisons to the subcommittee were also invited to distribute the draft to entities within their organizations. Comments were compiled and reviewed by the subcommittee cochairpersons, and relevant changes were incorporated into the guideline.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Excerpted by the National Guideline Clearinghouse (NGC)

The guideline contains the following recommendations for the treatment of a child diagnosed with attention-deficit/hyperactivity disorder (ADHD):

Recommendation 1: Primary care clinicians should establish a treatment program that recognizes ADHD as a chronic condition (strength of evidence: good; strength of recommendation: strong).

Given the high prevalence of ADHD among school-aged children (4% to 12%), primary care clinicians will encounter children with ADHD in their practices regularly and should have a strategy for diagnosis and long-term management of this condition. The primary care of children with ADHD includes attention to the main principles of care for children with any chronic condition, such as:

- Providing information about the condition
- Updating and monitoring family knowledge and understanding on a periodic basis
- Counseling about family response to the condition
- Developmentally appropriate education of the child about ADHD, with updates as the child grows
- Availability to answer family questions
- Ensuring coordination of health and other services
- Helping families set specific goals in areas related to the child's condition and its effects on daily activities
- Linking families with other families with children who have similar chronic conditions as needed and available

As with other chronic conditions, treatment of ADHD requires the development of child-specific treatment plans that describe methods and goals of treatment and means of monitoring care over time, including specific plans for follow-up (see Recommendation 5, below).

Primary care clinicians should educate parents and children about the ways in which ADHD can affect learning, behavior, self-esteem, social skills, and family function. This initial phase of patient education is critical to demystifying the diagnosis and providing parents and children with knowledge about the condition. Education enables parents to work with clinicians, educators, and, in some cases, mental health professionals to develop an effective treatment plan. A therapeutic alliance among clinicians, parents, and the child is enhanced when attention is directed toward cultural values that affect the child's health and health care. The long-term care of a child with ADHD requires an ongoing partnership among clinicians, parents, teachers, and the child. Other school personnel including nurses, psychologists, and counselors can also help with developing and monitoring plans.

Activities specific to the care of children with ADHD include providing current information on the etiology of ADHD, its treatment, long-term outcomes, and effects on daily life and family activities. Thorough family understanding of the problem is essential before discussing treatment options and side effects. What distinguishes this condition from most other chronic conditions managed by primary care clinicians is the important role that the education system plays in the treatment and monitoring of children with ADHD.

The clinician should be aware of community resources that provide services and know how to make referrals. Primary care providers may offer this information

directly or collaborate with other providers, especially subspecialists and mental health providers, to ensure families' access to needed information.

Recommendation 2: The treating clinician, parents, and child, in collaboration with school personnel, should specify appropriate target outcomes to guide management (strength of evidence: good; strength of recommendation: strong).

The core symptoms of ADHD (i.e., inattention, impulsivity, hyperactivity) can result in multiple areas of dysfunction relating to a child's performance in the home, school, or community. The primary goal of treatment should be to maximize function. Desired results include:

- Improvements in relationships with parents, siblings, teachers, and peers
- Decreased disruptive behaviors
- Improved academic performance, particularly in volume of work, efficiency, completion, and accuracy
- Increased independence in self-care or homework
- Improved self-esteem
- Enhanced safety in the community, such as in crossing streets or riding bicycles. Target outcomes should follow from the key symptoms the child manifests and the specific impairments these symptoms cause

The process of developing target outcomes requires input from parents, children, and teachers, as well as other school personnel where available and appropriate. They should agree on at least 3 to 6 key targets and desired changes as prerequisites to constructing the treatment plan. The goals should be realistic, attainable, and measurable. The methods of treatment and of monitoring change will vary as a function of the target outcomes.

Recommendation 3: The clinician should recommend stimulant medication (strength of evidence: good) and/or behavior therapy (strength of evidence: fair), as appropriate, to improve target outcomes in children with ADHD (strength of recommendation: strong).

The clinician should develop a comprehensive management plan focused on the target outcomes.

Stimulant Medication

Stimulant medications currently available include short-, intermediate-, and long-acting methylphenidate, and short-, intermediate-, and long-acting dextroamphetamine. The latter 2 formulations are mixed amphetamine salts (75% dextroamphetamine and 25% levoamphetamine). Pemoline, a long-acting stimulant, is rarely used now because of its rare but potentially fatal hepatotoxicity. Primary care clinicians should not use it routinely, and this guideline does not include it as a first- or second-line treatment for ADHD. Table 1 titled "Medications Used in the Treatment of Attention-Deficit/Hyperactivity Disorder" in the original guideline document indicates available medications and their doses.

Detailed instructions for determining the dose and schedule of stimulant medications are beyond the scope of this guideline. However, a few basic principles guide the available clinical options.

Unlike most other medications, stimulant dosages usually are not weight dependent. Clinicians should begin with a low dose of medication and titrate upward because of the marked individual variability in the dose-response relationship. The first dose that a child's symptoms respond to may not be the best dose to improve function. Clinicians should continue to use higher doses to achieve better responses. This strategy may require reducing the dose when a higher dose produces side effects or no further improvement. The best dose of medication for a given child is the one that leads to optimal effects with minimal side effects. The dosing schedules vary depending on target outcomes, although no consistent controlled studies compare different dosing schedules. For example, if there is a need for relief of symptoms only during school, a 5-day schedule may be sufficient. By contrast, a need for relief of symptoms at home and school suggests a 7-day schedule.

Recommendation 3A: For children on stimulants, if one stimulant does not work at the highest feasible dose, the clinician should recommend another.

At least 80% of children will respond to one of the stimulants if they are tried in a systematic way. Children who fail to show positive effects or who experience intolerable side effects on one stimulant medication should be tried on another of the recommended stimulant medications. The reasons for this recommendation include the following:

- The finding that most children who fail to respond to one medication will have a positive response to an alternative stimulant
- The safety and efficacy of stimulants in the treatment of ADHD compared with nonstimulant medications
- The numerous crossover trials that indicate the efficacy of different stimulants in the same child
- The idiosyncratic responses to medication

Children who fail 2 stimulant medications can be tried on a third type or formulation of stimulant medication. (As indicated in Recommendation 4, below, lack of response to treatment also should lead clinicians to assess the accuracy of the diagnosis and the possibility of undiagnosed coexisting conditions.)

Behavior Therapy

Behavior therapy usually is implemented by training parents and teachers in specific techniques of improving behavior.

Behavior therapy then involves providing rewards for demonstrating the desired behavior (e.g., positive reinforcement) or consequences for failure to meet the goals (e.g., punishment). Repetitive application of the rewards and consequences gradually shapes behavior. Although behavior therapy shares a set of principles, it includes different techniques with many of the strategies often combined into a comprehensive program. Refer to the original guideline document for a more detailed discussion of behavior therapy. (Table 2 titled "Effective Behavioral")

Techniques for Children With Attention-Deficit/Hyperactivity Disorder" in the original guideline document outlines specific behavior therapies that have been demonstrated as effective for ADHD.)

A wide range of clinicians, including psychologists, school personnel, community mental health therapists, or the primary care clinician, can implement behavior therapy directly or train others to implement behavior therapy. Many clinicians prefer to refer to community resources for behavior therapy because behavior therapy with parents is time-consuming and often does not lend itself to the structure and schedule of the primary care office. Schools may provide behavior therapy with teachers in the context of a U.S. Rehabilitation Act (Section 504) plan or an individual education plan (IEP). Where ADHD has a significant impact on a child's educational abilities, Section 504 requires schools to make classroom adaptations to help children with ADHD function in that setting. Adaptations may include preferential seating, decreased assignment and homework load, and behavior therapy implemented by the teacher.

Recommendation 4: When the selected management for a child with ADHD has not met target outcomes, clinicians should evaluate the original diagnosis, use of all appropriate treatments, adherence to the treatment plan, and presence of coexisting conditions (strength of evidence: weak; strength of recommendation: strong).

Most school-aged children with ADHD respond to a therapeutic regimen that includes stimulant medications and/or behavioral/environmental interventions. As noted in Recommendation 3A, above, when one stimulant medication appears ineffective (despite appropriate titration), clinicians should carry out a trial of a second stimulant medication. Continuing lack of response to treatment may reflect: (1) unrealistic target symptoms; (2) lack of information about the child's behavior; (3) an incorrect diagnosis; (4) a coexisting condition affecting the treatment of the ADHD; (5) lack of adherence to the treatment regimen; or (6) a treatment failure. As discussed previously, treatment of ADHD, while decreasing a child's level of impairment, may not fully eliminate the core symptoms of inattention, hyperactivity, and impulsivity. Similarly, children with ADHD may continue to have difficulties with peer relationships despite adequate treatment, and treatment for ADHD frequently shows no association with improvements in academic achievement as measured by standardized instruments.

Evaluation of treatment outcomes requires a careful collection of information from multiple sources, including parents, teachers, other adults in the child's environment (e.g., coaches), and the child. If the target symptoms are realistic and the lack of effectiveness is clear, the primary care clinician should reassess the accuracy of the diagnosis of ADHD. This reassessment should include review of the data initially obtained to make the diagnosis, as described in the American Academy of Pediatrics clinical practice guideline Disorder (a National Guideline Clearinghouse (NGC) guideline summary is also available). Reassessment usually will require gathering new information from the child, school, and family about the core symptoms of ADHD and their impact on the child's functioning. Clinicians should reconsider other conditions that can mimic ADHD.

As indicated in the diagnostic clinical practice guideline, other conditions commonly accompany ADHD in children, especially oppositional/conduct disorders, anxiety, depression, and learning disorders. These conditions often complicate the treatment of ADHD; clinicians should determine if children who do not respond to treatment have these conditions, either by direct determination in their offices or by referral to appropriate subspecialists (e.g., developmental-behavioral pediatricians, child psychiatrists, psychologists, or other mental health clinicians) or the school system (e.g., school psychologists for learning disabilities) for further evaluation. These coexisting conditions may not have been fully evaluated initially because of the severity of the ADHD, or the child may have developed another condition with time. Standard psycho-educational testing may clarify the role of learning and language disorders, although other disorders require different assessments.

Treatment plans for ADHD typically require children, families, and schools to enter into a long-term plan that includes a complex medication schedule along with environmental and behavioral interventions. Environmental and behavioral interventions will require ongoing efforts by parents, teachers, and the child. A common cause of nonresponse to treatment is lack of adherence to the treatment plan. Ongoing monitoring of a child's progress should assess the implementation of the plan and determine key problems with, and barriers to, implementation. The clinician should assess adherence to medication and behavior therapy. Lack of adherence is not the equivalent of treatment failure; clinicians should help families find solutions to adherence problems before considering a plan as a failure.

The following can be considered true treatment failure: (1) lack of response to 2 or 3 stimulant medications at maximum dose without side effects or at any dose with intolerable side effects; (2) inability of behavioral therapy or combination therapy to control the child's behaviors; and (3) the interference of a coexisting condition. In each of these situations, referral to mental health specialists who are knowledgeable about behavioral interventions in children is the next step unless the primary care clinician has expertise and experience in managing these situations.

Recommendation 5: The clinician should periodically provide a systematic follow-up for the child with ADHD. Monitoring should be directed to target outcomes and adverse effects, with information gathered from parents, teachers, and the child (strength of evidence: fair; strength of recommendation: strong).

Clinicians should establish a plan for periodic monitoring of the effects of treatment. Plans should include obtaining information about target behaviors, educational output, and medication side effects periodically through office visits, written reports, and phone calls. Monitoring data should include the date of refills, the medication type, dosage, frequency, quantity, and responses to treatment (both medication and behavior therapy). Data can be recorded in a flow sheet, ideally, or in a progress note within each patient's chart. The plan also should include a system for communication among parent, child, and clinician between visits as well as a method for periodic contact with the teacher or other school personnel before a follow-up visit. The monitoring plan should consider normal developmental changes in behavior over time, educational expectations that increase with each grade, and the dynamic nature of a child's home and school

environment, because changes in any of these factors may alter target behaviors. All participants should share the plan agenda. Clinicians should provide information and support at frequent intervals in a way that enables the child and family to make informed decisions that promote the child's long-term health and well-being.

Information about target symptoms will continue to come from the parents, child, and teacher. Office interviews, telephone conversations, teacher narratives, and periodic behavior report cards and checklists are among the methods used to obtain needed information. As with the diagnosis of ADHD, clinicians should have active and direct communication with schools. Adherence to medication and the behavior therapy program should be reviewed at each encounter.

The frequency of monitoring depends on the degree of dysfunction, complications, and adherence. Once the child is stable, an office visit every 3 to 6 months allows for assessment of learning and behavior. These visits also allow assessment of potential side effects of stimulants, such as decreased appetite and alteration of weight, height, and growth velocity. Periodic requests for medication refills offer an additional opportunity for communication with the family. At the refill request, the family can be asked about the child's functioning in school and interpersonal relationships, as well as updates on communication from the school. If any of the follow-up evaluations reveal a decrease in the targeted outcomes, the clinician must first establish that the family is adhering to the treatment plan.

CLINICAL ALGORITHM(S)

An algorithm is provided for the treatment of the school-aged child with attention-deficit/hyperactivity disorder.

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The recommendations contained in the practice guideline are based on the best available data. Where data were lacking, a combination of evidence and expert consensus was used. Strong recommendations were based on high-quality scientific evidence, or, in the absence of high-quality data, strong expert consensus. Fair and weak recommendations were based on lesser quality or limited data and expert consensus. Clinical options were identified as interventions because the subcommittee could not find compelling evidence for or against. These clinical options are interventions that a reasonable health care provider might or might not wish to implement in his or her practice.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Effective management/treatment of attention-deficit/hyperactivity disorder
- Maximization of function in a child with attention-deficit/hyperactivity disorder (ADHD), including:

- Improvements in relationships with parents, siblings, teachers, and peers
- Decreased disruptive behaviors
- Improved academic performance, particularly in volume of work, efficiency, completion, and accuracy
- Increased independence in self-care or homework
- Improved self-esteem
- Enhanced safety in the community, such as in crossing streets or riding bicycles.

POTENTIAL HARMS

Side effects or adverse reactions to medications.

• Stimulants. Side effects occur early in treatment and tend to be mild and short-lived. The most common side effects are decreased appetite, stomachache or headache, delayed sleep onset, jitteriness, or social withdrawal. Most of these symptoms can be successfully managed through adjustments in the dosage or schedule of medication. Approximately 15% to 30% of children experience motor tics, most of which are transient, while on stimulant medications.

Children who receive too high a dose or who are overly sensitive may become overfocused on the medication or appear dull or overly restricted. Many times this side effect can be addressed by lowering the dose. Rarely, with high doses, some children experience psychotic reactions, mood disturbances, or hallucinations.

No consistent reports of behavioral rebound, motor tics, or dose-related growth delays have been found in controlled studies although they are reported clinically. Concern for growth delay has been raised, but a prospective follow-up study into adult life has found no significant impairment of height attained.

• Tricyclic antidepressants. Desipramine use has been associated, in rare cases, with sudden death.

CONTRAINDICATIONS

CONTRAINDICATIONS

According to the "Physicians' Desk Reference" (Montvale [NJ]: Thomson Medical Economics, 2001) and medication package insert, methylphenidate is contraindicated in children with seizure disorders, a history of seizure disorder, or abnormal electroencephalograms. Studies of the use of methylphenidate have not, however, demonstrated an increase in seizure frequency or severity when it is added to appropriate anticonvulsant medications.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- This guideline is not intended as a sole source of guidance for the treatment of children with attention-deficit/hyperactivity disorder (ADHD). Rather, it is designed to assist the primary care clinician by providing a framework for decision-making. It is not intended to replace clinical judgment or to establish a protocol for all children with this condition, and may not provide the only appropriate approach to this problem.
- The recommendations in this statement do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

The American Academy of Pediatrics (AAP) is working on a comprehensive implementation project that will involve written and electronic information and physician/patient education components.

IMPLEMENTATION TOOLS

Clinical Algorithm Patient Resources

For information about <u>availability</u>, see the "Availability of Companion Documents" and "Patient Resources" fields below.

RELATED QUALITY TOOLS

- <u>National Initiative for Children's Healthcare Quality (NICHQ) Attention-Deficit/Hyperactivity Disorder (ADHD) Practitioners' Toolkit: Diagnosis</u>
- National Initiative for Children's Healthcare Quality (NICHQ) Attention— Deficit/Hyperactivity Disorder (ADHD) Practitioners' Toolkit: Treatment
- National Initiative for Children's Healthcare Quality (NICHQ) Attention-Deficit/Hyperactivity Disorder (ADHD) Practitioners' Toolkit: Parent Information and Support

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

American Academy of Pediatrics. Clinical practice guidelines: treatment of the school-aged child with attention-deficit/hyperactivity disorder. Pediatrics 2001 Oct; 108(4): 1033-44. [62 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2001 Oct

GUI DELI NE DEVELOPER(S)

American Academy of Pediatrics - Medical Specialty Society

SOURCE(S) OF FUNDING

American Academy of Pediatrics (AAP)

GUIDELINE COMMITTEE

Subcommittee on Attention-Deficit/Hyperactivity Disorder, Committee on Quality Improvement

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

AAP Policies are reviewed every 3 years by the authoring body, at which time a recommendation is made that the policy be retired, revised, or reaffirmed without change. Until the Board of Directors approves a revision or reaffirmation, or retires a statement, the current policy remains in effect.

GUIDELINE AVAILABILITY

Electronic copies: Available from the <u>American Academy of Pediatrics (AAP) Policy Web site</u>.

Print copies: Available from the American Academy of Pediatrics, 141 Northwest Point Blvd., P.O. Box 927, Elk Grove Village, IL 60009-0927.

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

 Jadad AR, Boyle M, Cunningham C, Kim M, Schachar R. Treatment of attention-deficit/hyperactivity disorder. (Prepared by McMaster University under Contract No. 290-97-0017). Rockville (MD): Department of Health and Human Services (U.S.), Agency for Healthcare Research and Quality. 1999 Nov. (Evidence Report/Technology Assessment; no. 11). AHRQ Publication No. 00-E005.

Electronic copies: Available from the <u>National Library of Medicine (NLM) Health</u> Services/Technology Assessment (HSTAT) Web site.

Print copies: Information regarding the availability of print copies is available from the <u>Agency for Healthcare Research and Quality (AHRQ) Web site</u>.

A related American Academy of Pediatrics guideline is also available:

• Clinical practice guideline: diagnosis and evaluation of the child with attention-deficit/hyperactivity disorder. Pediatrics 2000 May; 105(5):1158-70.

Electronic copies: Available from the <u>American Academy of Pediatrics (AAP) Policy Web site</u> (a <u>National Guideline Clearinghouse [NGC] guideline summary</u> is also available).

Print copies: Available from AAP, 141 Northwest Point Blvd., P.O. Box 927, Elk Grove Village, IL 60009-0927.

PATIENT RESOURCES

The following is available:

 American Academy of Pediatrics (AAP). ADHD and your school-aged child: information for parents. Elk Grove Village (IL): American Academy of Pediatrics, 2001 Oct. 1 p.

Electronic copies: Available from the <u>American Academy of Pediatrics (AAP) Policy</u> Web site.

Print copies: Available from the American Academy of Pediatrics, 141 NW Point Blvd, PO Box 927, Elk Grove Village, IL 60009-0927.

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC STATUS

This summary was completed by ECRI on May 7, 2002. The information was verified by the guideline developer on June 11, 2002.

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Date Modified: 1/17/2005



